#### **IBMS 7010-6BMM**

## Biochemical Mechanisms in Medicine (BMM) Journal Club and Research Presentations

#### **Fall 2023**

CLASS DAYS and TIME: Fridays, 3 – 4:30 pm, August 18<sup>th</sup> to December 15<sup>th</sup> 2023

**CLASSROOM:** Medical 444B

COURSE FACULTY: Alexander Mazin Ph.D., Peng Zhao Ph.D.

OFFICE LOCATION and HOURS: Medical 413.1B (PZ), Medical 413.3B (AM), by appointment

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**TELEPHONE**: 210-450-3857 (Mazin), 210-567-3772 (Zhao)

## READ THIS DOCUMENT CAREFULLY-YOU ARE RESPONSIBLE FOR ITS CONTENTS.

#### COURSE DESCRIPTION AND OBJECTIVES

Student Journal Club & Research Presentations course is a required course for all BMM students from the 2<sup>nd</sup> semester of their first year until graduation. The goal of the course is to provide students with continuous experience in: 1) discussion and critical analysis of current scientific literature and, 2) formal presentation of their ongoing research progress. The course meets weekly and alternates between Journal Club and Research Presentations. In the Journal Club section recent publications in the students' area of research are presented and discussed. In the Research Presentations section students present their own research.

Students will select their own papers for presentation during Journal Club. Papers should be from the recent biochemical literature. Students are encouraged to discuss possible papers for Journal Club with their PhD advisors. All papers for presentation must be approved by the instructors. Once a student has selected a paper, a pdf version must be sent to the instructors for approval at least 2 weeks before the scheduled presentation. Once approved the paper will be sent to the other students. All students are expected to have read each paper at a level that allows them to participate in the discussion.

Pre-requisites: None

Semester credit hours: 2.0 SCH

By the end of this course, each student should be able to:

- Critically comprehend the scientific literature, discuss and analyze emerging topics in the broadly defined areas of biochemistry, structural biology, and biophysics
- Effectively present scientific background, rationale, data, and results from the current literature
- Evaluate peer presentations of scientific papers including scientific background, rationale, data, and results
- Effectively present their preliminary data, rationale, hypotheses, specific aims, experimental procedures, and scientific results from their current research

### **COURSE ORGANIZATION**

## The main teaching modalities used in this course include:

- 1. Reading of assigned journal articles
- 2. Oral presentation of articles and research using PowerPoint (or similar) slides
- 3. Group discussions of papers and research

Materials: Laptop for reading scientific papers and for presentations.

Computer Access: The classroom will be equipped with a computer and projector. However, students may use their own computer/electronic device for presentation.

Reading Assignments: Any required course materials will be distributed to students prior to class periods.

#### **ATTENDANCE**

Attendance and participation are mandatory. All requests for excused absences should be made prior to the class. 'After-the-fact' requests will not be entertained. If a recurring absence is needed due to medical reasons, the student should notify the course director(s) and provide a doctor's note. Compensatory activities may be required to rectify absences due to unavoidable circumstances. For example, the student may be asked to write a brief summary of the hypothesis/objectives/findings of the paper presented in the session they missed. Any scheduled absences (scientific meeting attendance, etc.) must be approved by the course director(s).

#### **TEXTBOOKS**

Required: No textbook required

Recommended: Reading scientific review articles (e.g., Nature Reviews, CSHP, etc.)

#### GRADING POLICIES AND EXAMINATION PROCEDURES

Students are required to present one journal article and one research update per semester. Students in the second semester of their first year may present a second journal article in lieu of a research presentation. Grades will be based on attendance, class participation, and presentations. Students will be evaluated on the criteria listed in the rubric shown in Appendix 1. The final grade will be assigned based on the summation of the scores of the faculty evaluators for each of the listed criteria.

## **Grading Policy:**

Grades are weighted as follows: 25% research article presentation, 25% research update, 50% attendance and *participation* in discussion.

## Grading System:

A=90-100% B=80-89% C=70-79% F=<69%

## REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

In accordance with policy 4.2.3, Request for Accommodation Under the ADA and the ADA Amendments Act of 2008 (ADAAA), any student requesting accommodation must submit the appropriate request for accommodation under the American with Disabilities Act (ADA, form 100). to his/her appropriate Associate Dean of their School and a copy to the ADA Coordinator. Additional information may be obtained at: http://uthscsa.edu/eeo/request.asp.

#### ACADEMIC INTEGRITY AND PROFESSIONALISM

Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, signing attendance sheets for another student, and any act designed to give unfair advantage to a student or the attempt to commit such an act. Additional information may be obtained at:

http://catalog.uthscsa.edu/generalinformation/generalacademicpolicies/academicdishonestypolicy/

The values and ethics of the GSBS and UT Health San Antonio are based upon honesty, integrity, and mutual respect between all students, staff, and faculty. These values and ethics are applied to all endeavors that are related to activities performed by all members of the GSBS community. This includes any assignments, presentations, projects, and/or exams completed in this course. All students commit to not receiving or giving

any aid on the completion of their work in this course including the use of Artificial Intelligence text generators such as ChatGPT. If you are unsure how this might pertain to this course, please contact the course director before submission of any assigned work.

### TITLE IX AT UTHSCSA

*Title IX Defined:* Title of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads "no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

University of Texas Health Science Center San Antonio's Commitment: University of Texas Health Science Center San Antonio (UTHSCSA) is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, UTHSCSA does not discriminate on the basis of sex in its education programs and activities, and it encourages any student, faculty, or staff member who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to immediately report the incident to the Title IX Director.

In an emergency, victims of sexual abuse should call 911. For non-emergencies, they may contact UPD at 210-567- 2800. Additional information may be obtained at <a href="http://students.uthscsa.edu/titleix/">http://students.uthscsa.edu/titleix/</a>

#### **EMAIL POLICY**

Every student is issued a University e-mail address and account at the time of enrollment. As a matter of University Policy, communications between students and faculty that occur using the student's University e-mail address is considered official business. Therefore, students are expected to check their university email inboxes on a regular basis so that any announcements, instructions, or information regarding this course will be received in a timely way. Missed communications due to inadequate monitoring of incoming emails on the University's email server will never be a valid excuse for unsatisfactory academic progress

### **USE OF RECORDING DEVICES**

Recording of lectures and other learning activities in this course by any means (e.g., video, audio, etc.) is only permitted if approved by the instructor or required for compliance with Americans with Disabilities Act (ADA).

### **ELECTRONIC DEVICES**

Cell phones must be turned off during all class meetings and exams. Computers and electronic tablets are allowed only for participating in classroom activities (e.g., viewing slides presented in lecture or conference materials). No texting, tweeting, emailing, web- surfing, gaming, or any use of electronic devices that is not directly connected with classroom activities is permitted.

# APPENDIX 1: EVALUATION CRITERIA

Criterion	Needs improvement	Competent	Exemplary
Active participation	Does not contribute	=	Often volunteers, initiates new discussions on topics related to class topic
Relevance of participation to topic under consideration	Contributions are sometimes off-topic or distracting		Contributions are relevant and promote in-depth or novel analysis
Evidence of level of preparation	Does not appear to have read the material in advance and/or has little comprehension	class and can take advantage of	
Presentation Materials	Slides are disorganized and uninformative	Slides are clear, well organized, and informative	Slides are not only clear and informative, but incorporate additional information, flowcharts, guides for the listener
Presentation Style	Presentation is disorganized and hard to understand	Presentation is organized and clear	Presentation is highly professional and articulate as well as organized and clear

# Fall 2023 Roster

Time: Fridays August 19<sup>th</sup> –December 16<sup>th</sup> 3-4:30pm; Address: MED 444B

DATE	PRESENTER	Research / Article
August 18	Introductory Meeting	
August 25		
September 1	Labor Day	
September 8		
September 15		
September 22		
September 29		
October 6		
October 13		
October 20		
October 27		
November 3		
November 10		
November 17		
November 24	Thanksgiving	
December 1		
December 8		
December 15		

# Students (17)

Aida Badamchi
Sara Didomenico
Benjamin Jordan
Jeffrey Katz
Claudia McCown
Aninidita Nayak
George Parra
Shan Qi
Adam Sacks
Korilynn Goller
Erich Sohn
Pirouz Ebadi
Geovanni Zarceno
Cameron Durfee
Tony Lin
Renee Delgado
Sang Hyun Chun

Note: Junior students in cyan color